

Gen: TKS: TSD
PAS 1 R05-8410-1A

RCRA

OK to inspect per
John Wiley

IL0015-07

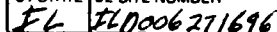
EPA Region 5 Records Ctr.



382780

7/21/85
2/2/85

| EPA 611902002 | | POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT | | I. IDENTIFICATION | |
|---|----------|--|---------------------|---------------------|----------------|
| 01 SITE NAME (Legal, common, or descriptive name of site) | | 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER | | 01 STATE | 02 SITE NUMBER |
| Olin Corporation Main Plant | | 427 Shamrock St. | | IL | IL0006271696 |
| 03 CITY | 04 STATE | 05 ZIP CODE | 06 COUNTY | 07 COUNTY CODE | 08 CONG DIST |
| East ALTON | IL | 62024 | Madison | 119 | 21 |
| 09 COORDINATES LATITUDE | | LONGITUDE | | Quad Map | |
| 385303.0 | | 0900600.0 | | 221 (a) | |
| 10 DIRECTIONS TO SITE (Starting from nearest public road) | | | | | |
| See attached map | | | | | |
| III. RESPONSIBLE PARTIES | | | | | |
| 01 OWNER (if known) | | 02 STREET (Business, mailing, residential) | | | |
| Same | | | | | |
| 03 CITY | 04 STATE | 05 ZIP CODE | 06 TELEPHONE NUMBER | | |
| | | | () | | |
| 07 OPERATOR (if known and different from owner) | | 08 STREET (Business, mailing, residential) | | | |
| Same | | | | | |
| 09 CITY | 10 STATE | 11 ZIP CODE | 12 TELEPHONE NUMBER | | |
| | | | () | | |
| 13 TYPE OF OWNERSHIP (Check one) | | | | | |
| <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL | | | | | |
| <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN | | | | | |
| 14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) | | | | | |
| <input checked="" type="checkbox"/> A. RCRA 3001 DATE RECEIVED: 11/18/80 <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 a) DATE RECEIVED: 6/12/81 <input type="checkbox"/> C. NONE | | | | | |
| IV. CHARACTERIZATION OF POTENTIAL HAZARD | | | | | |
| 01 ON SITE INSPECTION | | BY (Check all that apply) | | | |
| <input checked="" type="checkbox"/> YES DATE 5.7.71 | | <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR | | | |
| <input type="checkbox"/> NO | | <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: (Specify) | | | |
| 10/31/84 | | CONTRACTOR NAME(S): | | | |
| 02 SITE STATUS (Check one) | | 03 YEARS OF OPERATION | | | |
| <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN | | 1890 | | | |
| | | BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN | | | |
| 04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED | | | | | |
| Sludge (toxic/persistent) acids (corrosive) | | | | | |
| heavy metals (toxic/persistent) oily waste (soluble/flammable) | | | | | |
| occ munitions (explosive) | | | | | |
| 05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION | | | | | |
| Groundwater (population/environment) fire/explosion (population/environment) | | | | | |
| Surface water (population/environment) | | | | | |
| V. PRIORITY ASSESSMENT | | | | | |
| 01 PRIORITY FOR INSPECTION (Check one. If high priority is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents) | | | | | |
| <input checked="" type="checkbox"/> A. HIGH (inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (inspection required) <input type="checkbox"/> C. LOW (inspect on time available basis) <input type="checkbox"/> D. NONE (No further action needed, complete current disposition form) | | | | | |
| VI. INFORMATION AVAILABLE FROM | | | | | |
| 01 CONTACT | | 02 OF (Agency/Organization) | | 03 TELEPHONE NUMBER | |
| L. W. Marson | | Olin | | 6181258-3033 | |
| 04 PERSON RESPONSIBLE FOR ASSESSMENT | | 05 AGENCY | 06 ORGANIZATION | 07 TELEPHONE NUMBER | 08 DATE |
| Joe Murphy | | EPA | Land Permits | (217) 782-3523 | 12/28/81 |
| | | | | | MONTH DAY YEAR |



I HIGHLY VOLATILE
☒ EXPLOSIVE
☒ REACTIVE
 L INCOMPATIBLE
 M NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

FL

FLD006271696

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED 77,200

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Monitoring wells around waste treatment lagoon show elevated levels of radium & gross Alpha. Outfalls may recharge groundwater.

01 ☒ B SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED 49,300

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Lead excursions from outfalls. Slough discharge to sewer, site specific rule change for copper discharge.

01 ☒ C CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED UK

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Volatile and reactive materials in a populated area. No air monitoring.

01 ☒ D FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED 49,300

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Explosive and reactive materials in a populated area.

01 ☒ E DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED 29,700

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Explosive and toxic material in a populated area.

01 ☒ F CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED 1,249.9
(Acres)

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Handling and storage of solvents, toxics and heavy metals.
Spill Potential

01 ☒ G DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED 77,200

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

Monitoring wells around waste treatment lagoon show elevated levels of radium & gross Alpha. Outfalls may recharge groundwater.

01 ☒ H WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED 4,300

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Explosive and toxic materials in a populated area.

01 ☒ I POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED 77,200

02 ☐ OBSERVED (DATE _____)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Explosives and toxics in a populated area.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL ILD006271696

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
(Spills, leaks, standing liquids, leaking drums)

02 ☒ OBSERVED (DATE: 1/7/83)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED 77,200

04 NARRATIVE DESCRIPTION 7/3/84

Spill of 30 gal spent nitrating acid (Dca2) - Neutralized
Overflow of 300 gal. untreated wastewater (No 44) - Vacuumed

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 77,200

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Agency files Air - water - land
Phone calls to Air & water field inspectors
L. W. Maxson - OLIN

EXECUTIVE SUMMARY

Olin Corporation, Main Plant, ILD006271696, manufactures brass strip and fabricated products, metallic and shot shell ammunition and explosives and occupies over 1,000 acres on the north side of E. Alton, IL. The Main Plant is comprised of Zones 1-7, 14 and 15. Each zone contains several numbered areas which Olin designates as sites.

Olin's present Part A allows it to operate a solid waste management site, allows handling and temporary storage of heavy metal sludges and solids, solvents, acids, reactives and explosives in large quantities. It also covers waste water treatment and incineration. Technical review is to begin on the Part B which was received 3/9/84 for 26 hazardous waste sites at the Main Plant. Waste streams are sent off-site to Brighton 1 and 2, SCA, Gateway Petroleum, Chemical Waste Management and several other licensed facilities. Waste is received from Alton Box board to be burned in the heat recovery incinerators.

There are four incinerators in operation at the Main Plant:

1. a rotary destruct furnace at Zone 4 which destroys primer on off-spec brass parts;
2. an ECP incinerator at Zone 4 which presently burns smokeless powder scrap and explosive contaminated scrap. This incinerator is to be closed down when approval has been given to burn those wastes in the incinerators designated here as 3 and 4; and
- 3 & 4. two ECP heat recovery incinerators at Zone 3 which presently burn general factory waste and purchased packaging material. Ten special wastes which are now landfilled will be test burned in the two Zone 3 incinerators. If stack tests prove compliance with the regulations, permits can be issued to burn those wastes which will eliminate the landfilling of 65,000 cu/yds of material per year.

The facility is protected from flooding of the Wood and Mississippi Rivers by a 100 year flood plain levee which is maintained by the Wood River Drainage and Levee District. However, the possibility does exist that contamination from the plant could reach surface and/or ground-water. East Alton, Wood River and the surrounding populated areas obtain their water from drift wells.

There is a water treatment plant at Zone 6 of the Main Plant which uses physical/chemical treatment for metals. A holding lagoon next to the treatment plant is used to impound spills. Five groundwater monitoring wells were recently dug around the lagoon. Samples from the wells showed concentrations above USEPA standards for radium, gross Alpha and Coliform with a questionable result for lead.

There are two other impoundments at the Main Plant. The east and west slough receive cooling water and discharge to the sewer system. These discharges have not been tested.

Olin has NPDES permits for 17 outfalls from the Main Plant which discharge to the Wood River. There have been several lead excursions from the main outfall #001. In addition, Olin is allowed to exceed water quality standards for copper based on a site specific rule change by the Illinois Pollution Control Board.

The 103c form submitted to the Agency on 6/12/81 contains several misleading references which have been clarified by a phone call to L. W. Maxson of Olin. The 103c form states that the Main Plant:

1. is 261.5 acres in size;
2. has land treatment of wastes; and
3. has buried drums.

Mr. Maxson stated that:

1. the Main Plant is approximately 1,000 acres in size;
2. an experimental program was tried several years ago in which spent gun powder was spread on the ground to act as fertilizer. It did not improve the grass, so the program was discontinued. The gun powder should have dissipated by now and, if so, presents no current hazard.
3. there is no on-site burial of wastes, but a dozen buried fuel tanks may have been referred to as buried drums. The FIT contractor should verify items 2 and 3 as soon as possible.

A high priority for inspection has been assigned to this facility because:

1. elevated levels of radium, gross Alpha, copper, lead and BOD have been confirmed from water samples; therefore, the potential exists for contamination of ground and/or surface water;
2. although the company has safely handled large quantities of explosives for almost 100 years, the potential exists for explosion and fire in a populated area; and
3. large quantities of toxic and hazardous materials are handled in a populated area.